

CLASSES ARRANGED BY ART UNIT

11-52

| Class Title | | | Subclass Ranges | |
|-------------|------|---|-----------------|---------|
| | | | From | To |
| ----- | | | ----- | ----- |
| Art Unit | 3728 | | | |
| ----- | | | | |
| Class | 12 | BOOT AND SHOE MAKING | ALL | |
| Class | 36 | BOOTS, SHOES, AND LEGGINGS | ALL | |
| Class | 206 | SPECIAL RECEPTACLE OR PACKAGE | .5 | 6.1 |
| | | | 14 | 277 |
| | | | 300 | 315.11 |
| | | | 315.9 | 500 |
| | | | 521 | 521.1 |
| | | | 521.2 | FOR 000 |
| Art Unit | 3729 | | | |
| ----- | | | | |
| Class | 29 | METAL WORKING | 25.35 | 25.42 |
| | | | 592.1 | 623 |
| | | | 729 | |
| | | | 732 | 764 |
| | | | 825 | 887 |
| | | | 890.01 | |
| | | | FOR 000 | |
| Art Unit | 3731 | | | |
| ----- | | | | |
| Class | 606 | SURGERY | 138 | 236 |
| Class | 623 | PROSTHESIS (I.E., ARTIFICIAL BODY MEMBERS), PARTS THEREOF, OR AIDS AND ACCESSORIES THEREFOR | 1.11 | 1.22 |
| Art Unit | 3732 | | | |
| ----- | | | | |
| Class | 132 | TOILET | ALL | |
| Class | 433 | DENTISTRY | ALL | |
| Class | 600 | SURGERY | 201 | 249 |
| Class | 606 | SURGERY | 53 | 137 |
| Class | 623 | PROSTHESIS (I.E., ARTIFICIAL BODY MEMBERS), PARTS THEREOF, OR AIDS AND ACCESSORIES THEREFOR | 16.11 | 23.63 |
| Art Unit | 3736 | | | |
| ----- | | | | |
| Class | 128 | SURGERY | 897 | |

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(FILE 'HOME' ENTERED AT 12:10:24 ON 15 MAY 2003)

FILE 'BIOSIS' ENTERED AT 12:10:35 ON 15 MAY 2003

| | |
|----|---------------------------------|
| L1 | 229 S ERYTHROPHORE |
| L2 | 2089 S MELANOPHORE |
| L3 | 2404 S CHROMATOPHORE |
| L4 | 72 S L1 (L) L2 |
| L5 | 3 S BETTA (L) L3 |
| L6 | 12326 S CALCIUM CHANNEL BLOCKER |
| L7 | 0 S L6 AND L4 |
| L8 | 4 S L4 AND CALCIUM |
| L9 | 3 S ENCAPSULAT#### AND L3 |

CLASSES ARRANGED BY ART UNIT

II-53

| | | | Subclass Ranges | |
|-------------|------|---|-----------------|---------|
| Class Title | | | From | To |
| ----- | | | ----- | ----- |
| Art Unit | 3737 | | | |
| ----- | | | | |
| Class | 128 | SURGERY | 915 | 916 |
| | | | 920 | 925 |
| | | | 200 | FOR 000 |
| Class | 351 | OPTICS: EYE EXAMINING, VISION TESTING AND CORRECTING | 407 | 480 |
| Class | 600 | SURGERY | 2 | 4 |
| Class | 601 | SURGERY: KINESITHERAPY | | |
| Art Unit | 3738 | | | |
| ----- | | | | |
| Class | 128 | SURGERY | 898 | |
| | | | 1.1 | |
| Class | 623 | PROSTHESIS (I.E., ARTIFICIAL BODY MEMBERS), PARTS THEREOF, OR AIDS AND ACCESSORIES THEREFOR | 1.23 | 15.12 |
| | | | 23.64 | FOR 119 |
| Art Unit | 3739 | | | |
| ----- | | | | |
| Class | 600 | SURGERY | 101 | 200 |
| | | | 388 | 397 |
| | | | 920 | FOR 000 |
| Class | 606 | SURGERY | 1 | 52 |
| Class | 607 | SURGERY: LIGHT, THERMAL, AND ELECTRICAL APPLICATION | 96 | 114 |
| Art Unit | 3742 | | | |
| ----- | | | | |
| Class | 219 | ELECTRIC HEATING | 121.36 | 121.59 |
| | | | 200 | FOR 000 |
| Class | 373 | INDUSTRIAL ELECTRIC HEATING FURNACES | ALL | |
| Class | 392 | ELECTRIC RESISTANCE HEATING DEVICES | ALL | |
| Art Unit | 3743 | | | |
| ----- | | | | |
| Class | 126 | STOVES AND FURNACES | ALL | |
| Class | 165 | HEAT EXCHANGE | ALL | |
| Class | 431 | COMBUSTION | ALL | |
| Art Unit | 3744 | | | |
| ----- | | | | |
| Class | 62 | REFRIGERATION | ALL | |

WEST Search History

DATE: Thursday, May 15, 2003

Set Name Query

side by side

Hit Count Set Name

result set

DB=USPT,PGPB,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES;

OP=ADJ

| | | | |
|-----|--|-------|-----|
| L17 | erythrophore | 14 | L17 |
| L16 | erythrophore and melanophore | 2 | L16 |
| L15 | L14 and l7 | 7 | L15 |
| L14 | calcium near channel near blocker | 3428 | L14 |
| L13 | clacium near channel near blocker | 1 | L13 |
| L12 | l7 and l9 | 0 | L12 |
| L11 | l9 and (screenS3 or assay) | 52 | L11 |
| L10 | L9 and l1 | 0 | L10 |
| L9 | betta | 334 | L9 |
| L8 | L7 and (fish or fishes or pisces or betta or belontiidae or ctenopinae or labyrinth) | 167 | L8 |
| L7 | l1 or melanophore or erythrophore | 431 | L7 |
| L6 | pisces and l1 | 2 | L6 |
| L5 | L4 and (melanophore or erythrophore) | 1 | L5 |
| L4 | (betta or belontiidae or ctenopinae or labyrinth) | 18537 | L4 |
| L3 | L1 and (betta or belontiidae or ctenopinae or labyrinth) | 0 | L3 |
| L2 | L1 and (betta or belontiidae or ctenopinae) | 0 | L2 |
| L1 | chromatophore | 100 | L1 |

END OF SEARCH HISTORY

CLASSES ARRANGED BY ART UNIT

II-54

| | | | Subclass Ranges | |
|-------------|------|--|-----------------|----------|
| Class Title | | | From | To |
| ----- | | | | |
| Art Unit | 3745 | | | |
| ----- | | | | |
| Class | 60 | POWER PLANTS | 325 | 494 |
| | | | 532 | 594 |
| Class | 91 | MOTORS: EXPANSIBLE CHAMBER TYPE | 1 | 471 |
| | | | 508 | DIG 4 |
| Class | 92 | EXPANSIBLE CHAMBER DEVICES | ALL | |
| Class | 415 | ROTARY KINETIC FLUID MOTORS OR PUMPS | ALL | |
| Class | 416 | FLUID REACTION SURFACES (I.E., IMPELLERS) | ALL | |
| Art Unit | 3746 | | | |
| ----- | | | | |
| Class | 60 | POWER PLANTS | 39.01 | 269 |
| | | | 722 | 917 |
| | | | FOR 100 | FOR 118 |
| Class | 91 | MOTORS: EXPANSIBLE CHAMBER TYPE | 472 | 507 |
| | | | FOR 000 | |
| Class | 239 | FLUID SPRINKLING, SPRAYING, AND DIFFUSING | 127.1 | 127.3 |
| | | | 265.11 | 265.43 |
| Class | 417 | PUMPS | ALL | |
| Class | 418 | ROTARY EXPANSIBLE CHAMBER DEVICES | 164 | |
| Art Unit | 3747 | | | |
| ----- | | | | |
| Class | 123 | INTERNAL-COMBUSTION ENGINES | 1 A | 3 |
| | | | 142.5 E | 198.0D C |
| | | | 19 | 42 |
| | | | 250 | 558 |
| | | | 46 A | 89 |
| | | | 567 | DIG 13 |
| | | | FOR 100 | FOR 128 |
| Class | 701 | DATA PROCESSING: VEHICLES, NAVIGATION, AND RELATIVE LOCATION | 101 | 115 |
| | | | FOR 000 | |
| Art Unit | 3748 | | | |
| ----- | | | | |
| Class | 60 | POWER PLANTS | 272 | 324 |

L8 ANSWER 1 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 AN 1994:154135 BIOSIS
 DN PREV199497167135
 TI Intracellular **calcium** and cAMP regulate directional pigment movements in teleost erythrophores.
 AU Kotz, Kimberly J.; McNiven, Mark A. (1)
 CS (1) Guggenheim 17, Mayo Clinic, 200 1st St., SW, Rochester, MN 55905 USA
 SO Journal of Cell Biology, (1994) Vol. 124, No. 4, pp. 463-474.
 ISSN: 0021-9525.
 DT Article
 LA English
 AB Teleost pigment cells (**erythrophores** and **melanophores**) are useful models for studying the regulation of rapid, microtubule-dependent organelle transport. Previous studies suggest that **melanophores** regulate the direction of pigment movements via changes in intracellular cAMP (Rozdzial and Haimo, 1986a; Sammak et al., 1992), whereas **erythrophores** may use **calcium**- (Ca-2+ -) based regulation (Luby-Phelps and Porter, 1982; McNiven and Ward, 1988). Despite these observations, there have been no direct measurements in intact **erythrophores** or any cell type correlating changes of intracellular free Ca-2+ ($(\text{Ca-2+})\text{-i}$) with organelle movements. Here we demonstrate that extracellular Ca-2+ is necessary and that a Ca-2+ influx via microinjection is sufficient to induce pigment aggregation in **erythrophores**, but not **melanophores** of squirrel fish. Using the Ca-2+ -sensitive indicator, Fura-2, we demonstrate that $(\text{Ca-2+})\text{-i}$ rises dramatically concomitant with aggregation of pigment granules in **erythrophores**, but not **melanophores**. In addition, we find that an **erythrophore** stimulated to aggregate pigment will immediately transmit a rise in $(\text{Ca-2+})\text{-i}$ to neighboring cells, suggesting that these cells are electrically coupled. Surprisingly, we find that a fall in $(\text{Ca-2+})\text{-i}$ is not sufficient to induce pigment dispersion in **erythrophores**, contrary to the findings obtained with the ionophore and lysed-cell models (Luby-Phelps and Porter, 1982; McNiven and Ward, 1988). We find that a rise in intracellular cAMP ($(\text{cAMP})\text{-i}$) induces pigment dispersion, and that this dispersive stimulus can be overridden by an aggregation stimulus, suggesting that both high $(\text{cAMP})\text{-i}$ and low $(\text{Ca-2+})\text{-i}$ are necessary to produce pigment dispersion in **erythrophores**.